

FIG. 1A

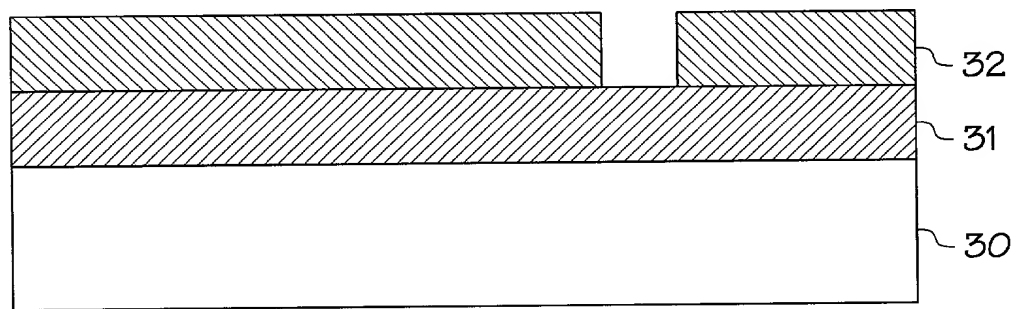


FIG. 1B

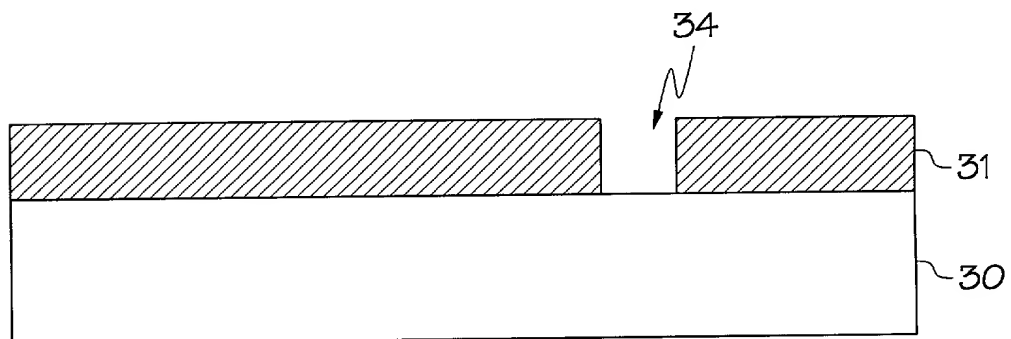


FIG. 1C

2/20

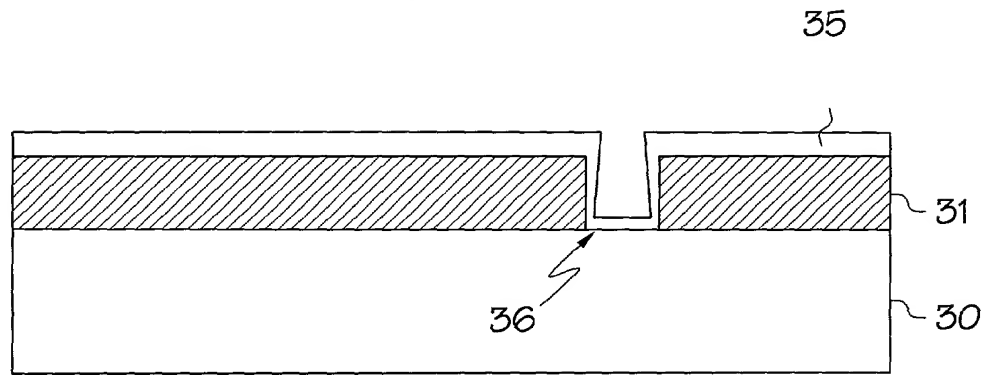


FIG. 1D

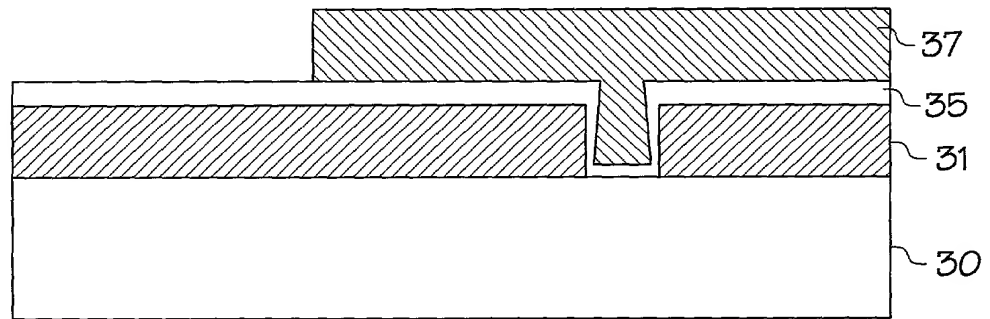


FIG. 1E

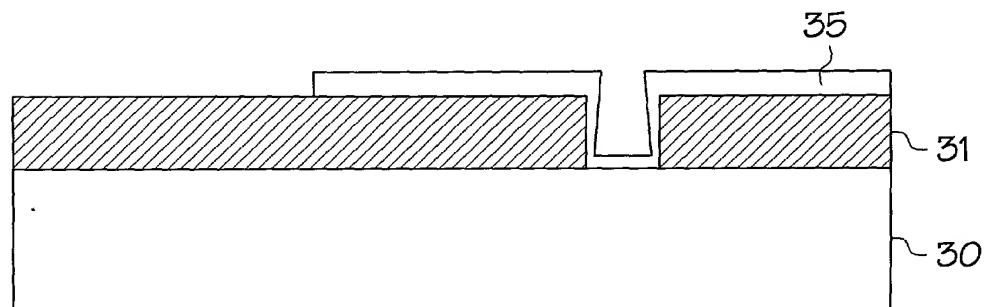


FIG. 1F

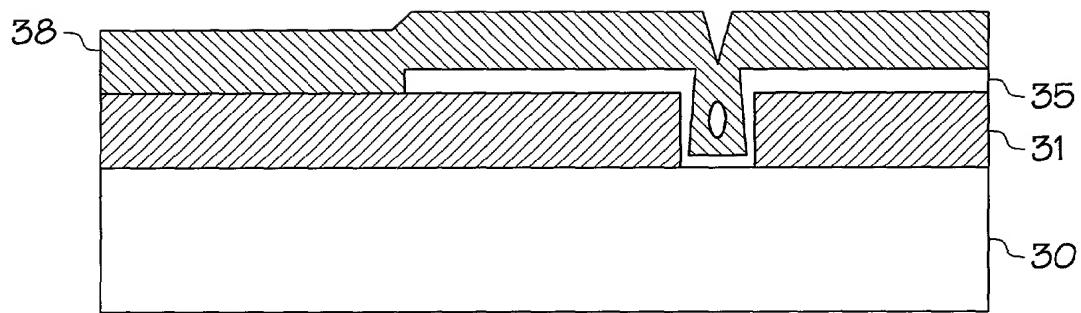


FIG. 1G

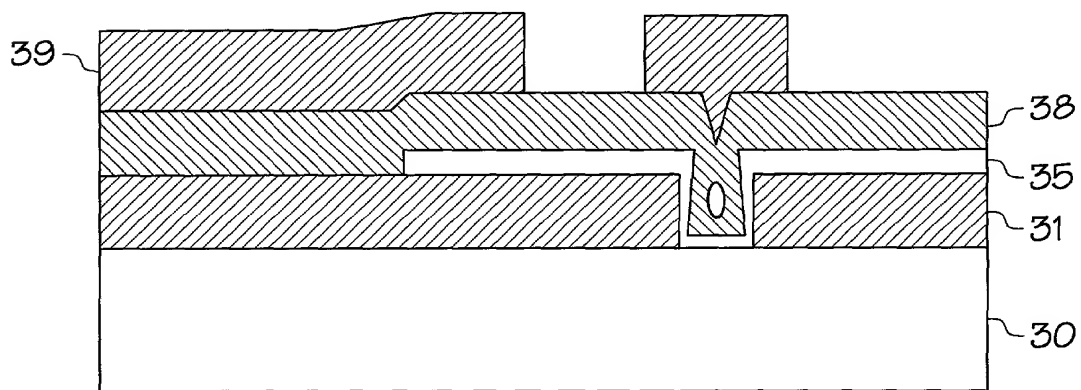


FIG. 1H

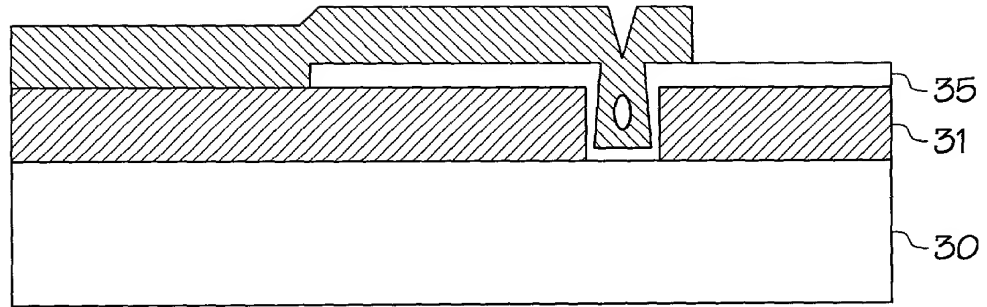


FIG. 1I

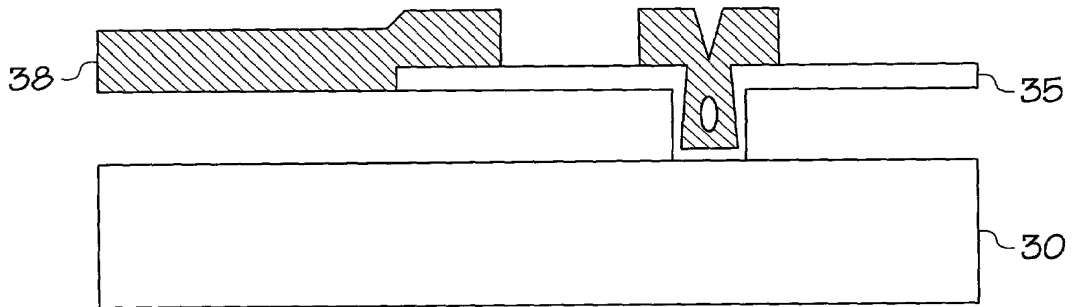


FIG. 1J

5/20

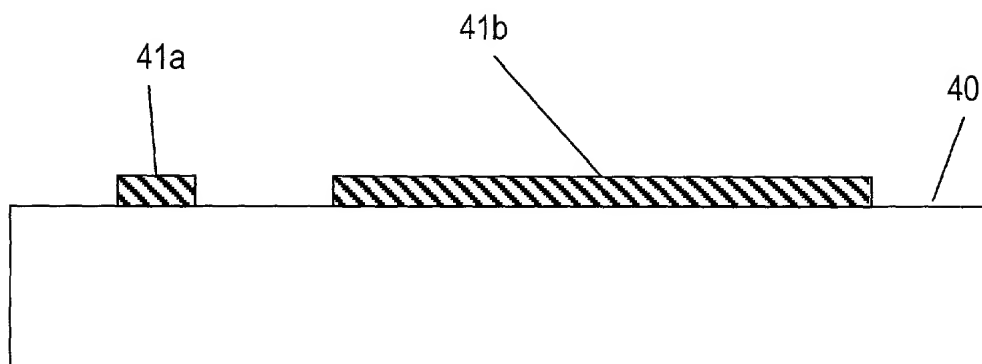


FIG. 2A

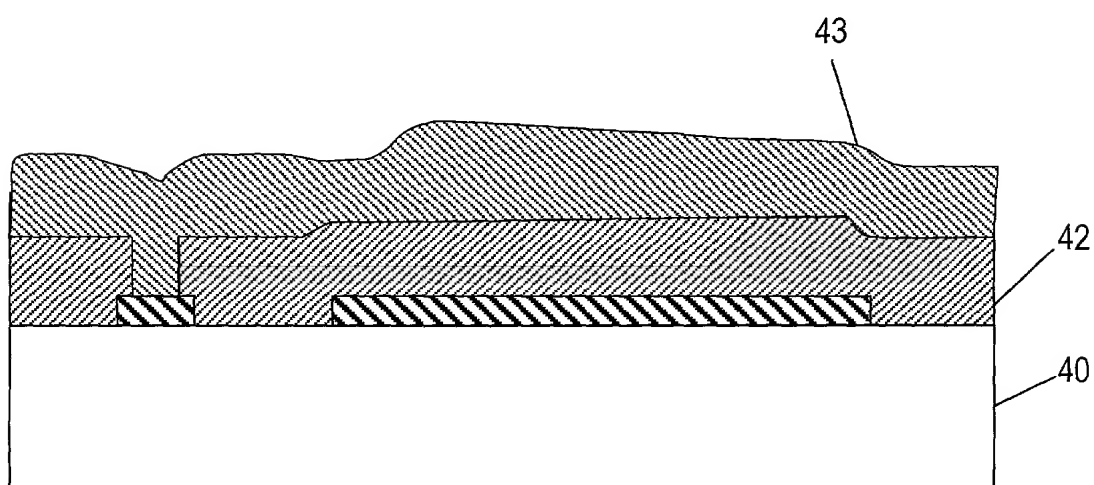


FIG. 2B

6/20

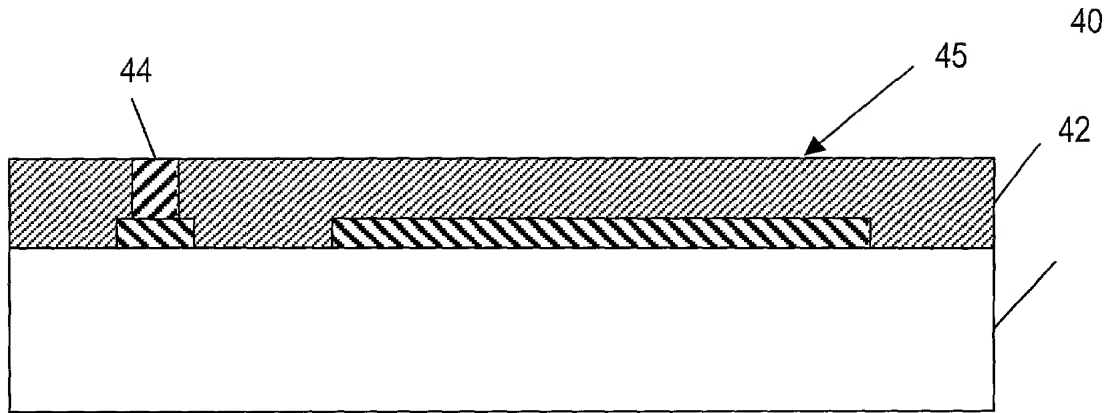
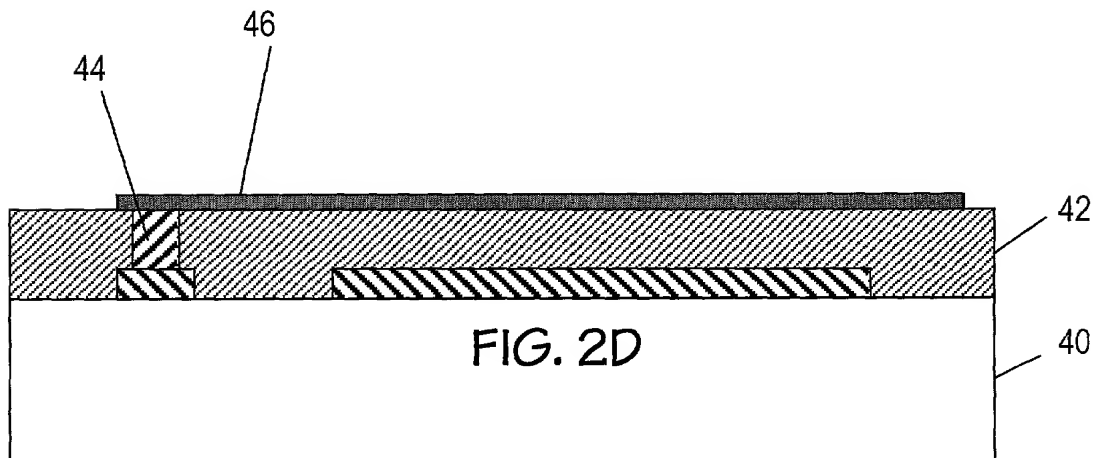


FIG. 2C



7/20

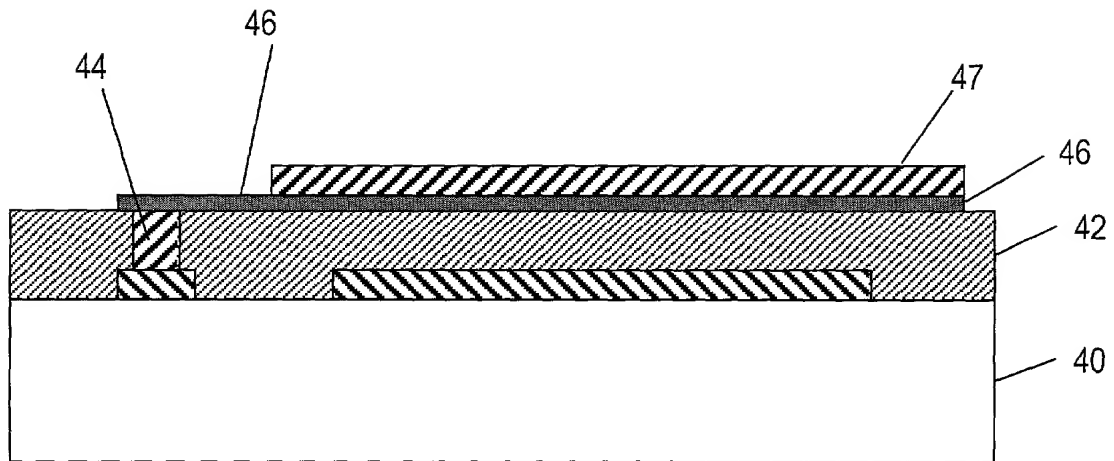


FIG. 2E

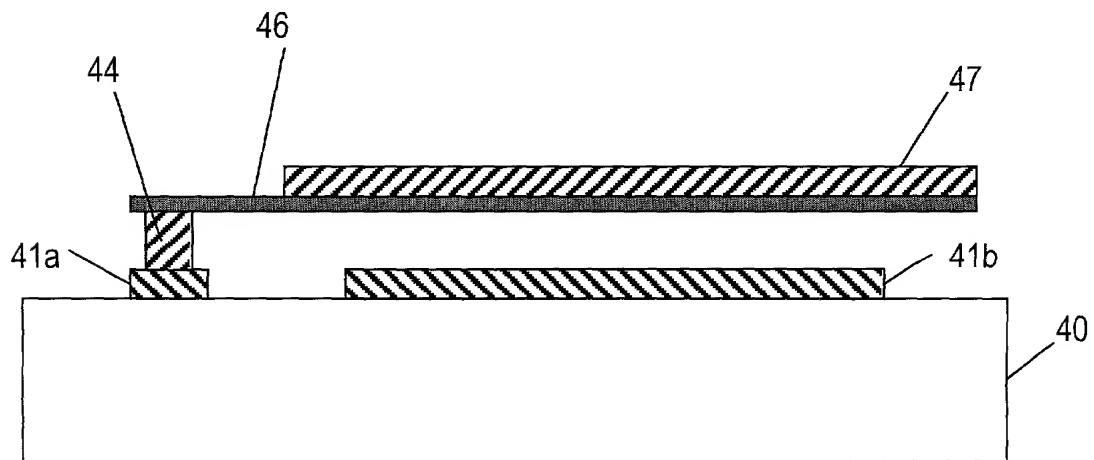


FIG. 2F

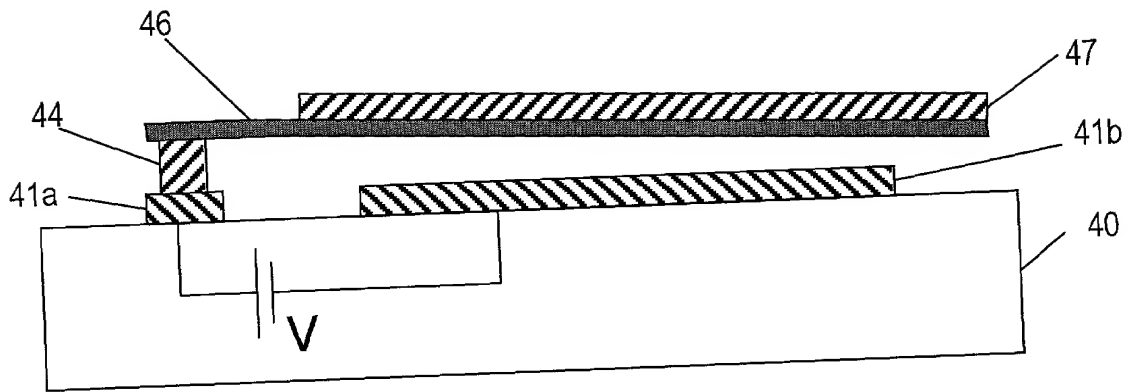


FIG. 2G

9/20

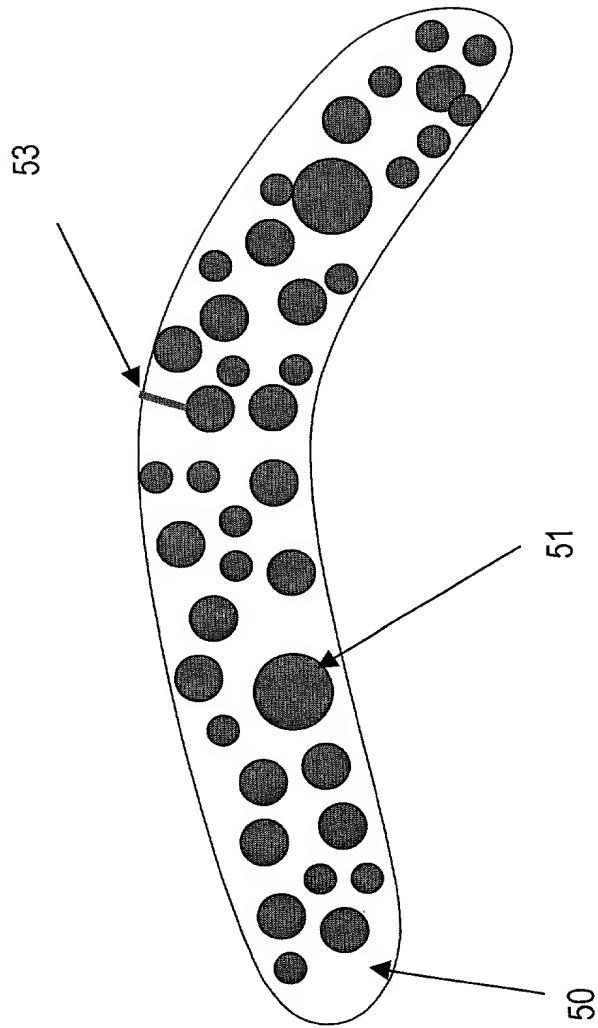
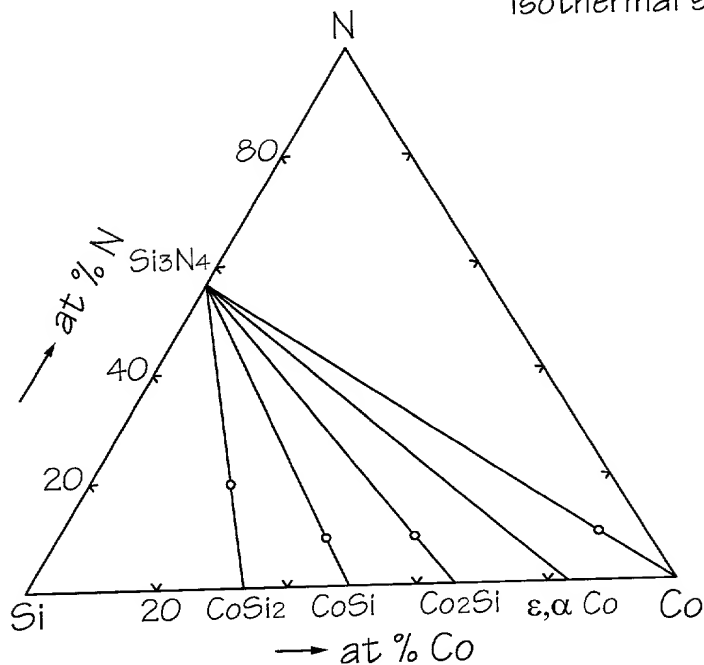


FIG. 3

10/20

Co-Si-N Isothermal Section
at 1000°C

isothermal section 1273 K

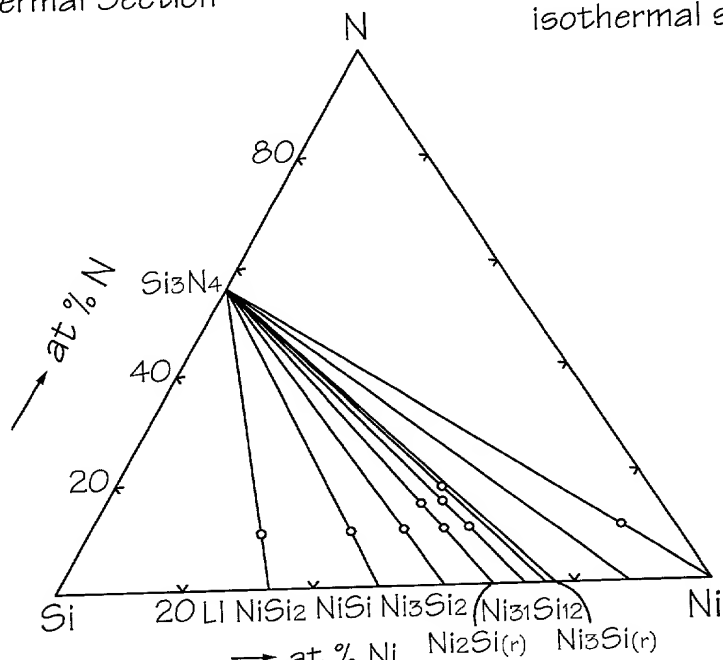


In the absence of external
nitrogen pressure.

FIG. 4A

Ni-Si-N Isothermal Section
at 900°C

isothermal section 1173 K



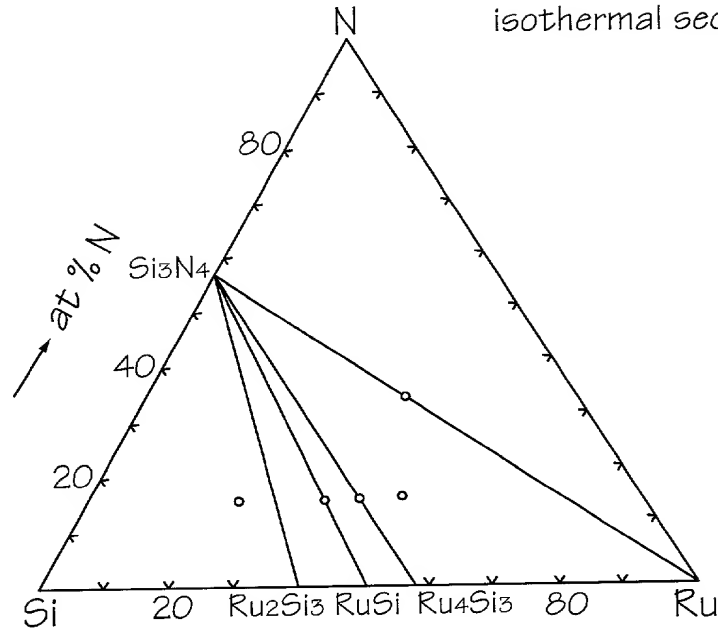
In the absence of external
nitrogen pressure.

FIG. 4B

11/20

Ru-Si-N Isothermal Section
at 1000°C

isothermal section 1273 K



In the absence of external
nitrogen pressure.

→ at % Ru
FIG. 4C

Ag-Si-N Isothermal Section
at 900°C

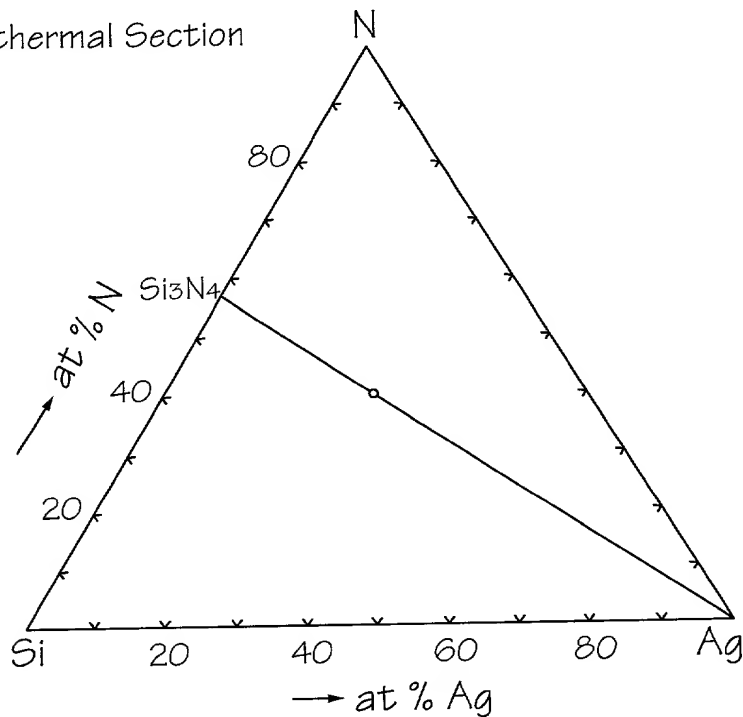


FIG. 4D

12/20

Au-Si-N Isothermal Section
at 900°C

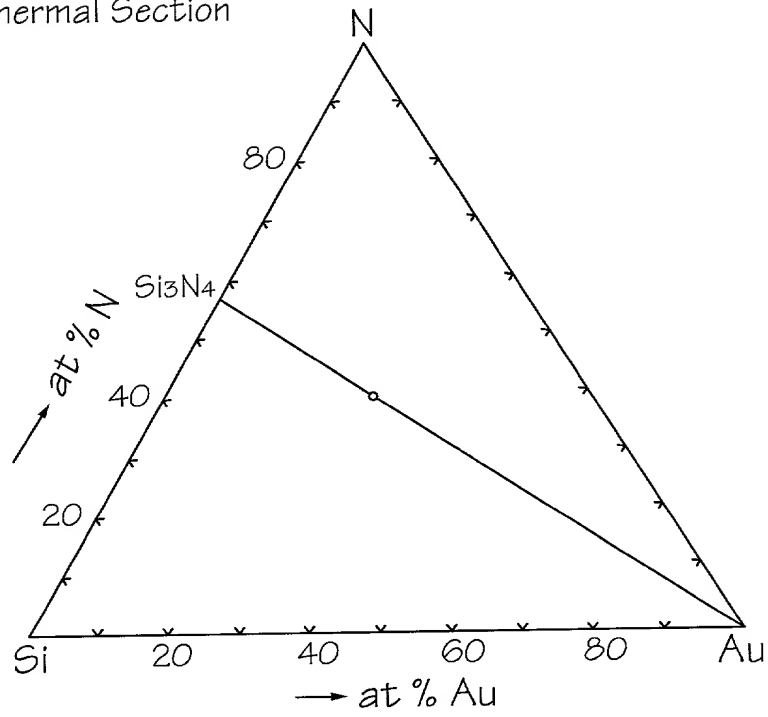


FIG. 4E

Cu-Si-N Isothermal Section
at 700°C

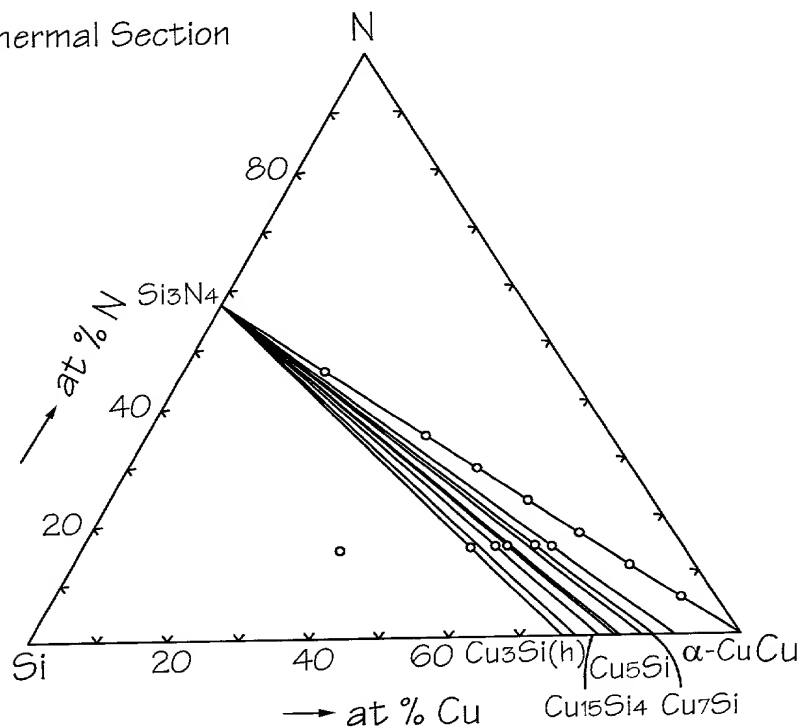


FIG. 4F

13/20

Ag-B-N Isothermal Section
at 800°C

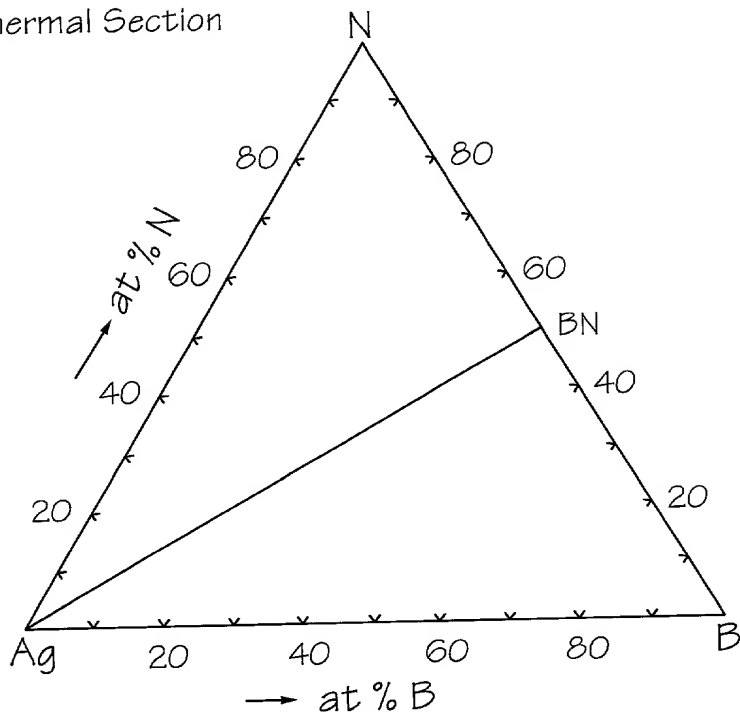


FIG. 4G

Au-B-N Isothermal Section
at 800°C

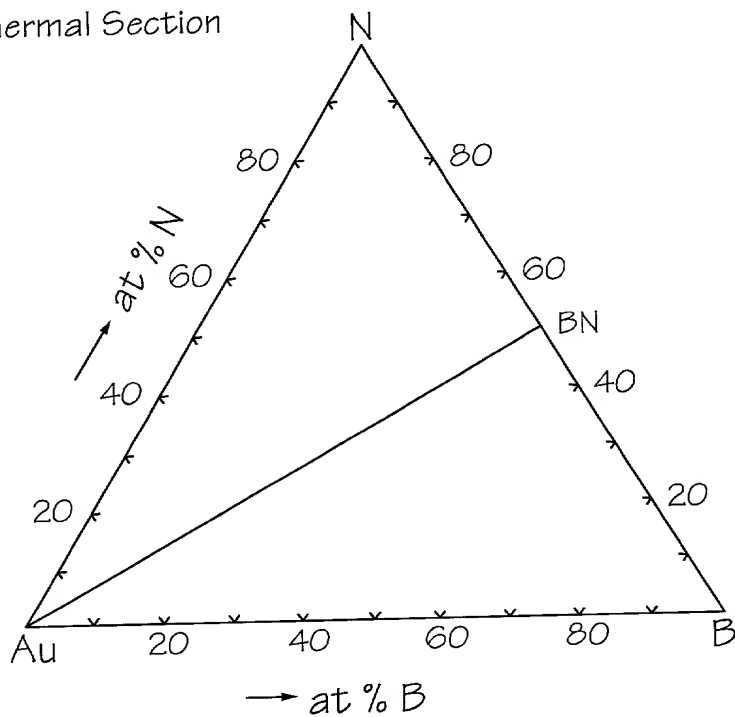
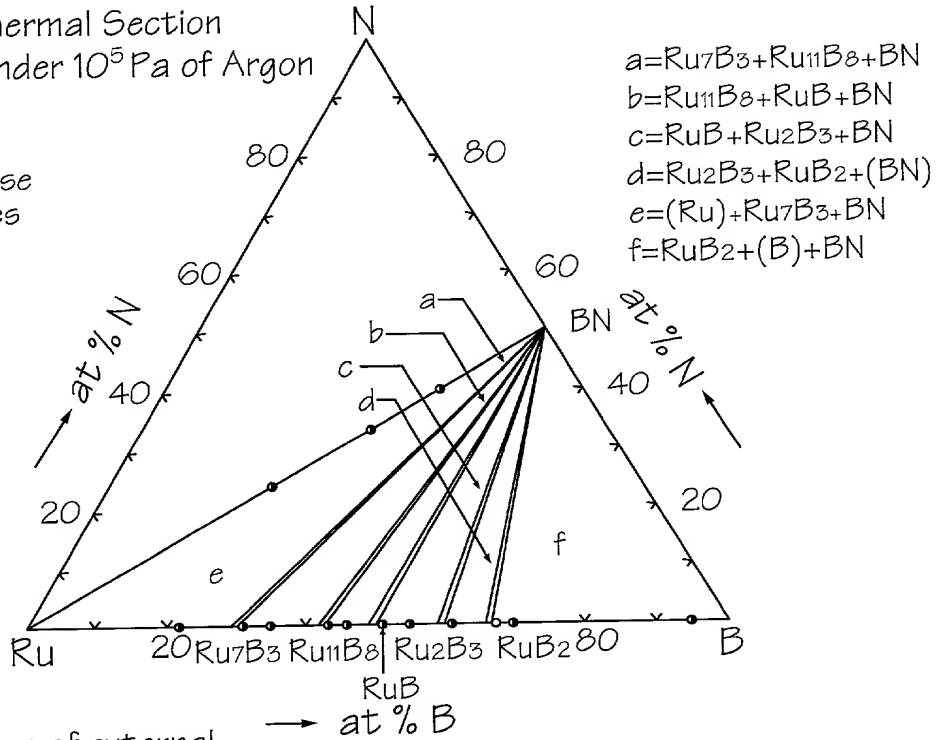


FIG. 4H

14/20

Ru-B-N Isothermal Section
at 1200°C Under 10^5 Pa of Argon

- single phase
- two phases

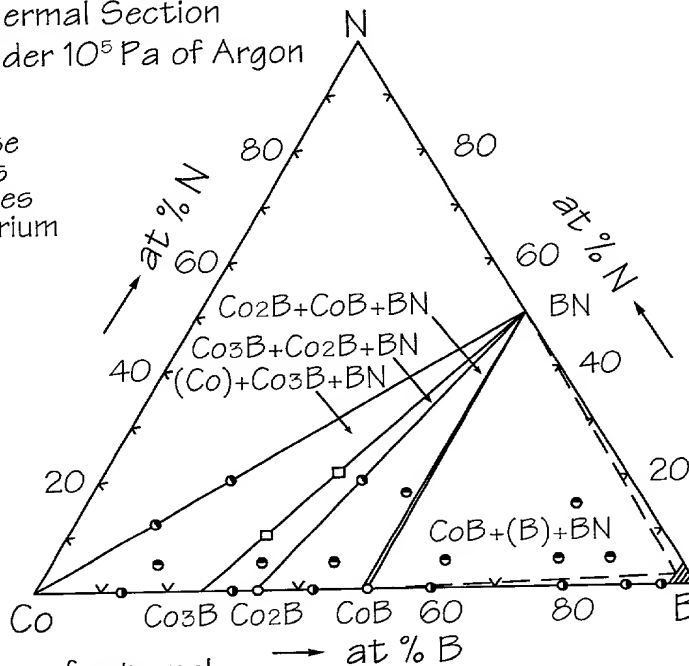


In the absence of external
nitrogen.

FIG. 4I

Co-B-N Isothermal Section
at 900°C Under 10^5 Pa of Argon

- single phase
- two phases
- ◻ three phases
- ◻ non-equilibrium
(no Co_3B)

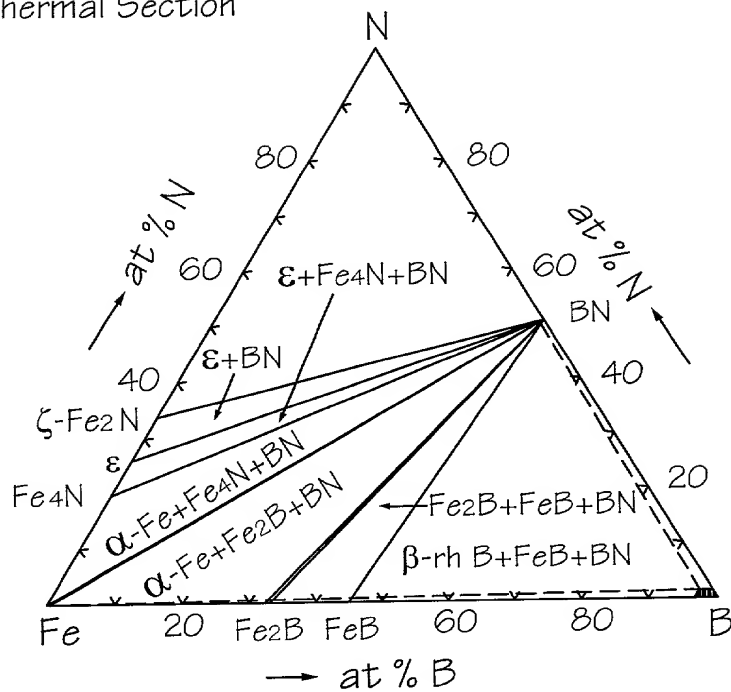


In the absence of external
nitrogen.

FIG. 4J

15/20

Fe-B-N Isothermal Section
at 400°C

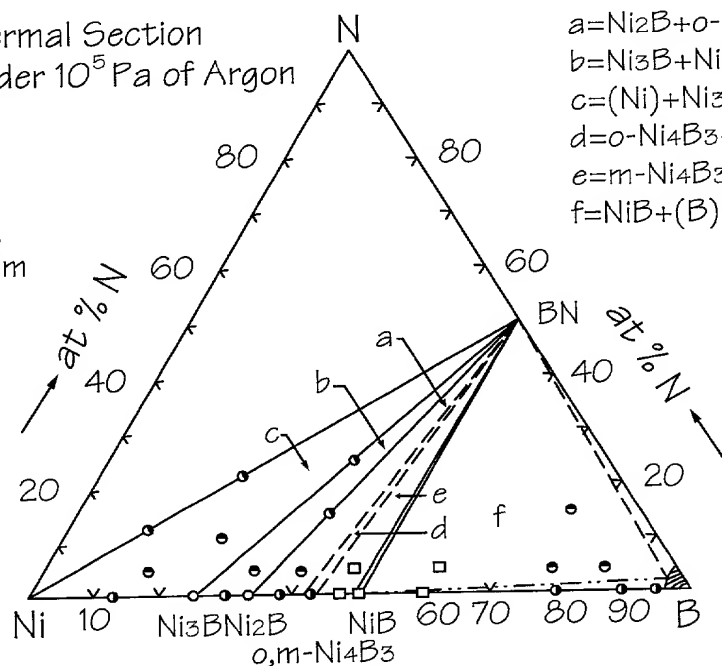


In the absence of external
nitrogen.

FIG. 4K

Ni-B-N Isothermal Section
at 900°C Under 10^5 Pa of Argon

- single phase
- two phases
- three phases
- non-equilibrium



In the absence of external
nitrogen.

FIG. 4L

16/20

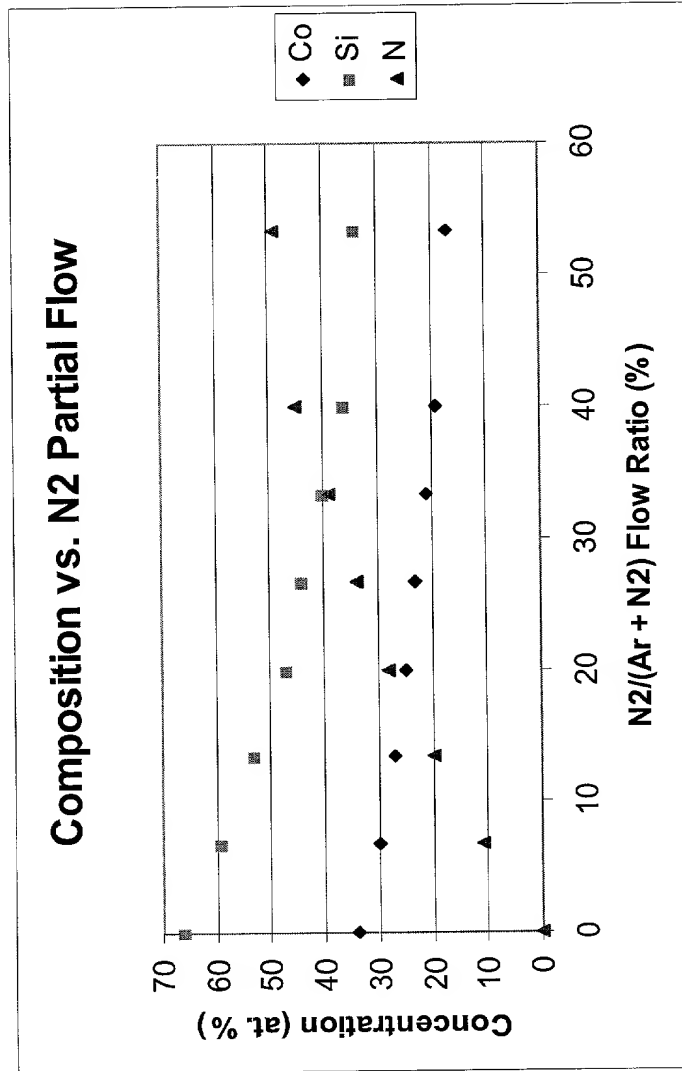


FIG. 5

17/20

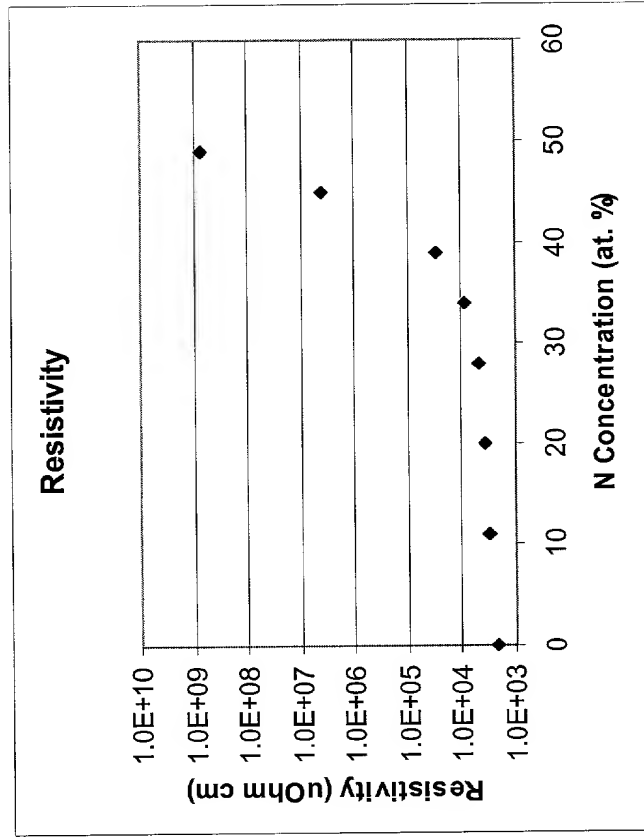


FIG. 6

18/20

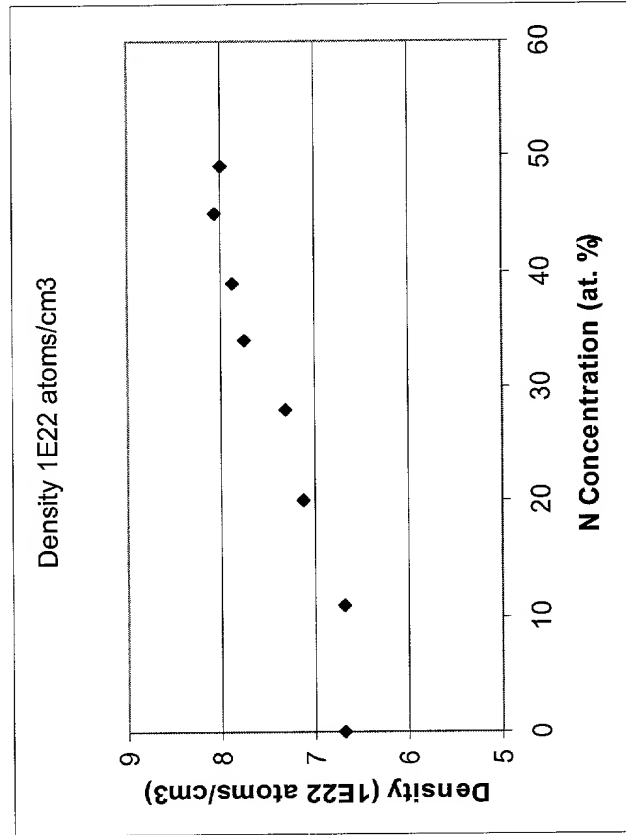


FIG. 7

19/20

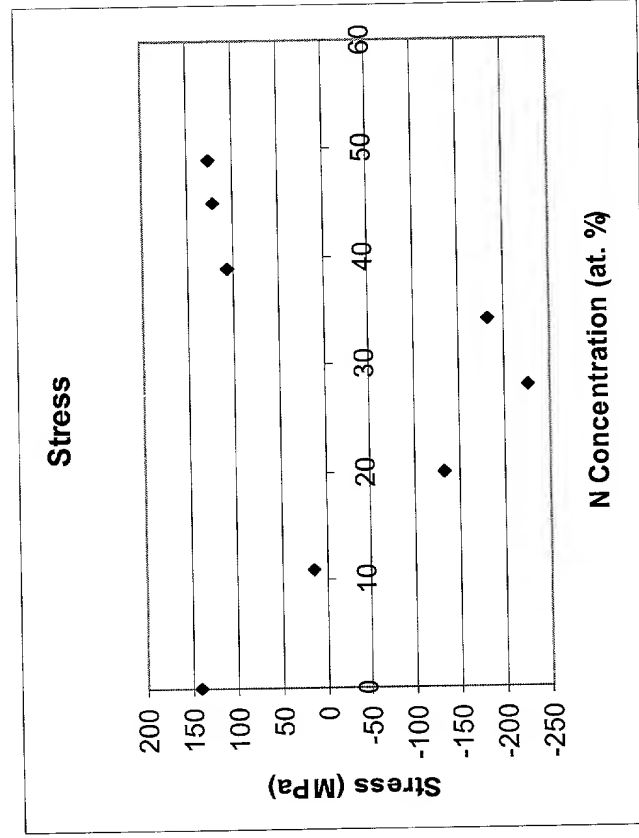


FIG. 8

20/20

	10 sccm	20 sccm	30 sccm
Cl ₂ base	200	230	270
CF ₄ base	133	202	202

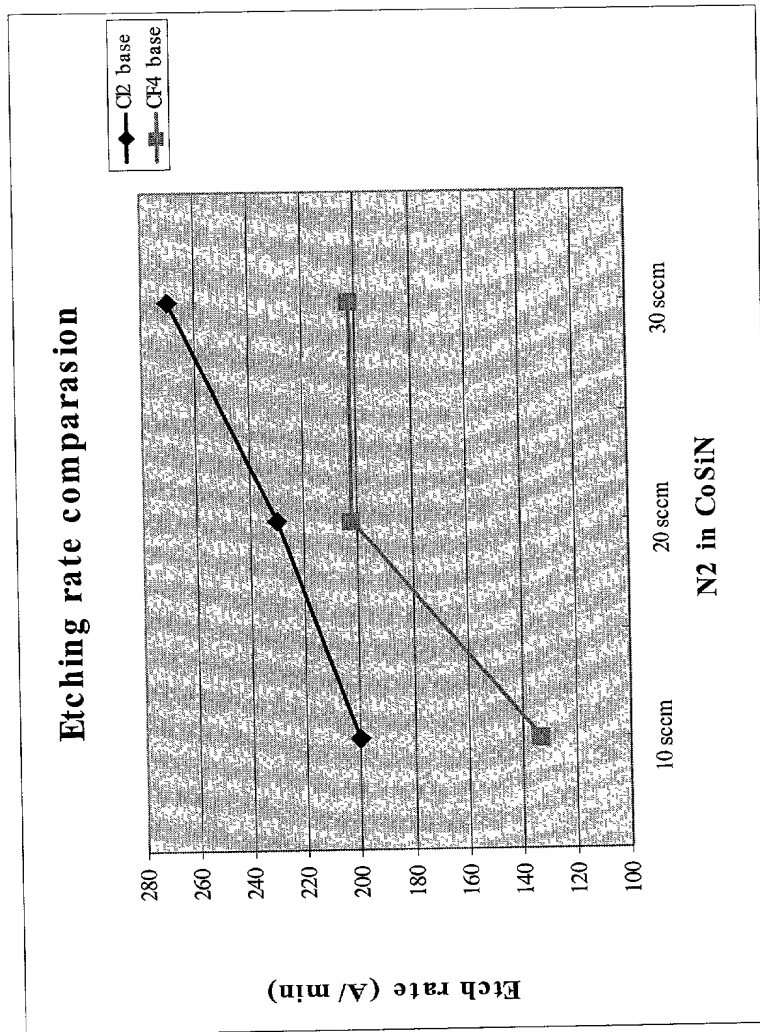


FIG. 9